

# ECTOPIC PREGNANCY WITH ORAL CONTRACEPTIVE USE

Hung-Hung Lin<sup>1</sup>, Ming-Chao Huang<sup>1</sup>, Chen-Ju Lin<sup>1\*</sup>, Chih-Ping Chen<sup>1,2,3,4</sup>

Departments of <sup>1</sup>Obstetrics and Gynecology, and <sup>2</sup>Medical Research, Mackay Memorial Hospital, Taipei,

<sup>3</sup>Department of Biotechnology, Asia University, and <sup>4</sup>College of Chinese Medicine,

China Medical University, Taichung, Taiwan.

A 29-year-old, gravida 3, para 1, woman presented to our emergency department with a 1-day history of right pelvic pain. She had also experienced intermittent vaginal spotting for the previous 20 days. She had been taking oral contraceptive pills (Diane-35; Bayer Schering Pharma) regularly for 3 months. A pregnancy test performed on arrival was positive. Gynecologic ultrasound revealed no intrauterine gestational sac, but a right adnexal mass measuring 2 × 1.6 cm and a small amount of cul-de-sac fluid were noticed. She underwent video-laparoscopic surgery because of a suspected ectopic pregnancy. A right tubal pregnancy was detected in the ampulla portion and right total salpingectomy was performed. She recovered well after the operation.

Ectopic pregnancies occur from 1 in every 40 to 1 in every 100 pregnancies. This rate increased four-fold between 1970 and 1992 [1]. A large series of patients studied by the Beijing Collaborating Study Group for Ectopic Pregnancy reported that the incidence of ectopic pregnancy varied with different contraceptive methods: 0.65 per 1,000 women of reproductive age (15–49 years) in intrauterine device (IUD) users, 0.21 per 1,000 women of reproductive age in oral contraceptive users, and 0.57 per 1,000 women of reproductive age in couples using condoms or spermicides [2].

Past IUD use could mildly elevate the risk of ectopic pregnancy [3], and this risk was further increased with duration of IUD use. There is no evidence of a decline in risk with increased time since stopping IUD use [4]. The IUD is the only contraceptive method associated with an increased risk of ectopic pregnancy after discontinuation of use [5].

Regarding oral contraception, a study from Zimbabwe reported an absolute risk of ectopic pregnancy of 0.5 per 1,000 woman-years in women taking

the combined pill [6]. The US Food and Drug Administration reviewed seven contraceptive drug products that were associated with an increased risk of ectopic pregnancy when contraception failed [7]. The use of oral contraception with estrogen and progesterone can slow the normal movement of the fertilized egg through the tubal epithelium and result in implantation in the tube. However, Larimore and Stanford reported that the association of ectopic pregnancies with oral contraceptives has been overlooked in the medical literature, and that most practitioners who prescribe or dispense oral contraceptives are unaware of this association [6]. Furthermore, there are some reports of ectopic pregnancy after failure of emergency contraceptive pills [8–10]. Although the risk of ectopic pregnancy in those who use oral contraceptives is relatively low, clinicians should be aware of the possibility of an ectopic gestation when oral contraceptives fail.

Overall, all assessed contraceptives, including current and past use of oral contraceptives, past IUD use, and tubal sterilization protect against ectopic pregnancies [5] by reducing the pregnancy rate.

In this report, we present a rare case of ectopic pregnancy following regular use of contraceptive pills. Clinicians should be aware of the possibility of an ectopic pregnancy following contraceptive pill failure. If a woman who is taking oral contraceptives presents with pelvic pain and unusual vaginal bleeding, we recommend that the possibility of ectopic pregnancy be ruled out using an effective clinical approach.

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\*Correspondence to: Dr Chen-Ju Lin, Department of Obstetrics and Gynecology, Mackay Memorial Hospital, 92, Section 2, Chung-Shan North Road, Taipei 104, Taiwan.

E-mail: alfielin@yahoo.com.tw

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